THE CHILLING EFFECTS OF SURVEILLANCE: DEINDIVIDUATION AND REACTANCE

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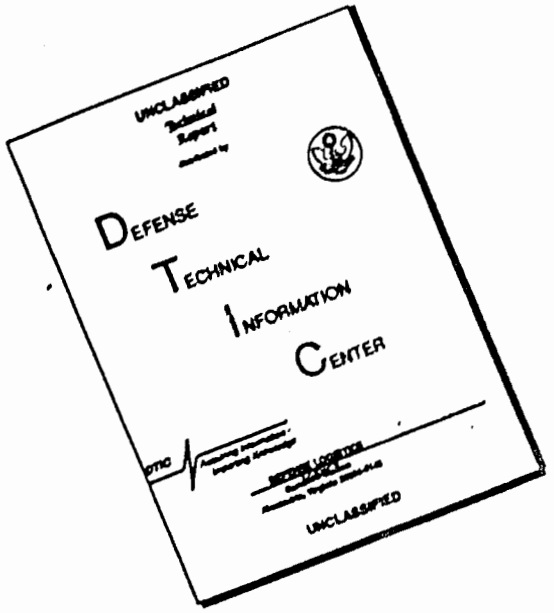

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The Chilling Effects of Surveillance: Deindividuation and Reactance

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13 ABSTRACT

Two social-psychological theories can be applied to the effect of potentially aversive surveillance on opinion inhibition. The deindividuation-individuation hypothesis predicts that people will avoid opinion expression, while the psychological reactance hypothesis predicts opinion assertion and attack upon threatening agents. To test these notions, a reactance-arousing threat (videotaping of marijuana opinions which would be sent to the FBI) was orthogonally crossed with actual performance of the threatened action. Content analyses of opinions and a factor analysis of mood ratings substantially support the deindividuation-individuation prediction, although there was an interaction whereby Ss both threatened and actually videotaped were most anti-government and anti-marijuana. None of these effects were attributable to the mere act of videotaping.

14 KEY WORDS	LINK A		LINK B		LINK C	
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EXPERIMENTAL METHODOLOGY						
FREEDOM OF ASSEMBLY						
FREEDOM OF SPEECH						
GOVERNMENT INTERVENTION						
MARIJUANA ENDORSEMENT						
PERCEIVED THREAT						
POLITICAL SPYING						
REACTANCE						
SOCIAL PSYCHOLOGICAL THEORIES						
SURVEILLANCE						

Abstract

Two social-psychological theories can be applied to the effect of potentially aversive surveillance on opinion inhibition. The de-individuation-individuation hypothesis predicts that people will avoid opinion expression, while the psychological reactance hypothesis predicts opinion assertionand attack upon threatening agents. To test these notions, a reactance-arousing threat (videotaping of marijuana opinions which would be sent to the FBI) was orthogonally crossed with actual performance of the threatened action. Content analyses of opinions and a factor analysis of mood ratings substantially support the deindividuation-individuation prediction, although there was an interaction whereby Ss both threatened and actually videotaped were most anti-government and anti-marijuana. None of these effects were attributable to the mere act of videotaping.

The Chilling Effects of Surveillance:
Deindividuation and Reactance

The average American is being increasingly alerted to the reality that his private life may be under surveillance by government agencies and other institutions (Elliff, 1973; Navasky and Lewin, 1973; Taylor, 1969). The Watergate scandals, revelations of White House bugging, and Congressional investigations of domestic spying by the Central Intelligence Agency have served to underscore the developing paranoid theme of American life: Big Brother may be watching you! Proposals for national data banks, use of surveillance helicopters by urban police forces, the presence of observation cameras in banks and supermarkets, and airport security searches of person and property are but some of the signs that our private lives are under such increasing scrutiny.

Government surveillance of political rallies, demonstrations, and assemblies may have a particularly chilling effect on the citizen's First Amendment right to free assembly and free speech. As political activists of all stripes and degrees are often aware, local, state, and national police or investigative units frequently send agents to observe and file reports on public gatherings (Donner, 1973; Harney and Cross, 1968; Horowitz, 1974; Schultz, 1963). These gatherings need not even have a political purpose, as can be seen from this quote of an

internal FBI report:

> During October, 1970, a Black Festival Week was held at [a college]. This was organized by about ten of the 35 Negro students . . . the purpose of the festival was to invite persons to view the works of art and products developed out of neighborhood arts and crafts programs . . . . Out of this activity . . . there was formed on campus a Black Student Union. (Elliff, 1973, p. 284)

More recently, a federal judge, Thomas Griesa, barred the FBI from "attending, surveilling, listening to or otherwise monitoring" the national convention of the Young Socialist Alliance Party. Griesa wrote "The record before me indicates convincingly that the presence of FBI informants at the meeting will inhibit the right of association" (Los Angeles Times, December 12, 1974).

There are a number of psychological questions bearing upon constitutional issues arising from such situations. Does knowledge of potential surveillance inhibit a citizen from attending lawful rallies? Do citizens who attend such meetings inhibit their speech or behavior if they suspect the presence of government surveillance? If people are inhibited by surveillance, the First Amendment has been at least psychologically breached. If so, courts and legislatures may need to consider these effects in order to specify more narrowly those conditions that justify surveillance and those where surveillance violates important rights of citizens.

The social psychological theories of individuation-deindividuation (Festinger, Pepitone, and Newcomb, 1952; Ziller, 1964; Zimbardo, 1969) and psychological reactance (Brehm, 1966, 1972; Wicklund, 1974) can be applied

to these questions. The individuated person feels that his behavior, mannerisms, and feelings differentiate him to some extent from others. The deindividuated person, on the other hand, feels anonymous, submerged in the crowd, and as such, indistinguishable from others. He has lost, at least temporarily, his personal uniqueness and identificability.

Maslach (1974) tested Ziller's (1964) hypothesis that "individuation is desirable within a supportive social environment, but anonymity is sought as a defense against a threatening environment." When individuation leads to reward, people strive for recognition of their personal self; however, if individuation is accompanied by punishment, people act to increase their anonymity in the presence of the punishing agent. Maslach found that subjects in an aversive environment (threat of electric shock) did indeed actively try to deindividuate themselves. They were more likely to describe themselves in mundane terms, more restricted in body gestures, less likely to look at an experimenter, less likely to speak in a discussion, in short, they behaved in defensive ways. Many of these effects were more pronounced when the subject had purposely been made to feel more individuated by the experimenter.

Surveillance by potentially punishing government agents, in terms of this individuation hypothesis, is an individuating act. The citizen's face may be photographed, his voice recorded, or detailed reports made on his behavior. A citizen who believes he is under surveillance is theoretically like Maslach's aversive environment-individuated subject. He should feel uncomfortable, anxious, and should act to deindividuate himself by inhibiting his speech or muting his criticism if he does speak,

thus not speaking or acting freely. As the threat of being singled out becomes greater or more certain, the citizen may simply avoid attending political rallies altogether.

Reactance theory offers another perspective on the surveillance dilemma. Reactance is defined as an aversive motivational state experienced when a person "thinks one of his freedoms has been threatened or eliminated" (Brehm, 1966). The more important the freedom, or option to perform a set of behaviors, the more reactance is aroused when those behaviors are threatened. "Importance" is a function of the number of motives the threatened behaviors can satisfy. Worchel (1971, as reported by Brehm, 1972) found that subjects who were expected to have high levels of reactance were more aggressive towards the person stimulating the reactance than against a person who frustrated them. Annoyance and anger may be emotional side effects of reactance arousal.

Brehm argues that a threat to, or actual elimination of, a behavioral freedom results in increased motivation to perform the behavior. The behavior increases in subjective value, which facilitates actions to restore the freedom "by exercising it or by attacking the agent responsible for the threat" (Brehm, 1972).

Thus, it is possible to draw from these two theories contrasting predictions about the effect of surveillance of a person's public behavior when the surveillance carries an implied threat. The individuation hypothesis would hold that under such circumstances, people will feel inhibited, anxious, and act in ways to deindividuate themselves by increasing their anonymity and guarding their behavior so that they don't seem "out of line." The reactance hypothesis, on the other hand,

leads to the prediction that people will be upset at their loss of freedom and will increase efforts to exercise their free speech, and will attack the agents of the surveillance.

The following experiment was conducted both to test these hypotheses and to provide a source of reliable data on the behavioral consequences of surveillance.

Method

Overview of Design

Male and female subjects (Ss) were tested in groups as part of a study allegedly concerned with student opinion. Each S was requested to talk, out of earshot of other Ss, about his or her personal opinion of marijuana penalties. Threat was manipulated by telling half of the Ss that videotapes of the statement would go to police and FBI units (T), the other Ss in the No Threat (NT) condition were not so informed. After completing a questionnaire, each S was taken to a video room to record his or her statement. Orthogonal to the Threat manipulations, half of the Ss were actually recorded, believing that the videotape would be sent to police and FBI units. The other half did not undergo such surveillance. These were the Surveillance (SU) and No Surveillance (NSU) conditions, respectively. This procedure resulted in a 2 x 2 factorial design. A fifth video control (C) condition was included to assess possible inhibiting effects on performance of mere videotaping.

Subjects

Subjects were 76 male and female undergraduates who volunteered for

course credit to participate in a study titled "Student Movement Discussion." All subjects were enrolled in an introductory psychology class at the University of California, Los Angeles. Subjects were run in groups of four or five, each group was randomly assigned to a treatment condition. There were 16 Ss each in T-SU, NT-SU, and NT-NSU conditions and 14 each in T-NSU and C groups. No subject's data was excluded from analysis.

Procedure

Ss arrived at a waiting room marked with a large sign reading "Student Movement Discussion Study" along with the names of four sponsoring professors labeled as psychologists or political scientists. The experimenter (E), a female, introduced herself as a graduate student interested in both psychology and political science and as such was involved with a long-term project designed to gauge a cross section of student opinion on sensitive issues.

During this introductory discussion E took roll call twice and established eye contact with each S. She also called each S by name once in addition to the roll call. E did this in an attempt to individuate each S in the group as much as possible (cf. Maslach, 1974; Zimbardo, 1969). After delivering the rationale for the experiment and explaining that both individual statements and group discussion would be held, E consulted a hidden code and then delivered the Threat manipulations.

Threat of surveillance. Ss under Threat (T) were told: "The results of this study will be used by us in an analysis of the current status of the student movement. In addition, we will be videotaping you, both as individuals and as a group. Copies of these videotapes, I should tell

you, are going to be sent to various police agencies to show their rookies, to help in training. Other federal agencies, like the FBI, will get copies for their own analysis and training purposes." Under No Threat (NT), E said: "The results of this study will be used by us in an analysis of the current status of the student movement." Some Ss in the Threat condition asked why the police and FBI would get copies. E always replied in such cases that arrangements had been made by the faculty sponsoring the project.

After these manipulations, E revealed that the research project was sponsored by the "Bradley Foundation," a fictitious nonprofit organization. She explained that the foundation required experimenters to hand out a booklet to all Ss involved in foundation sponsored research. E then handed out these booklets which were impressive, professionally made, disguised attitude questionnaires. A short preface to the S noted "Our interest is in what the subjects themselves feel about the project. This helps us to determine the type of research the Foundation will support in the future." S was then directed to anonymously complete three Likert-type items and an open-ended question measuring desire to participate in the experiment.

When all Ss completed this measure, E took the group into a "video room" which had a table and chairs, tape recorder, and videocamera unit. To allow Ss time to examine these surroundings and to further individuate Ss, E prepared large gummed name-tags for the Ss and had them affix the tags to their clothes in plain sight. After each S was tagged, E delivered the Surveillance manipulations.

Actual surveillance. Expectations of surveillance were varied by leading Ss to believe their speeches would or would not be video-recorded. There were four manipulations depending on the level of threat and surveillance. Under T-SU, E merely said "Here is the equipment we'll be using" and then she turned on the videocamera. Under T-NSU, an assistant had previously placed a hastily scrawled note on the camera. E read the note, acted exasperated, and then tried operating the camera. After a while she said "Hmmm. This is too bad. The guy who sets up the video says he can't get it to work, something is burned out. I guess we'll just have to use the tape recorder. This means that we won't be able to send your tapes to anyone else. But I can use just the voice recording for my own particular analysis." Under NT-SU, E said "Here is the equipment we'll be using", and then repeated all but the first sentence of the Threat manipulation. For Ss under NT-NSU, E said "Here is the equipment we'll be using. All we need is the tape recorder." She then moved the videocamera into a corner facing the wall.

Ss then returned to the waiting room. E instructed them about the topic of the individual statement: "The topic I'd like each of you to talk about is: 'Marijuana possession in small quantities should be a misdemeanor, but in large quantities should be a felony.' Take a couple of minutes now to organize your thoughts into pro and con statements. That is, when I record you, limit yourself to short pro or con ideas about marijuana possession. You'll be able to elaborate on these later. You'll have two minutes in which to make your individual statement." E answered any questions at this point.

The marijuana topic and its particular wording was chosen because

pretest questionnaires (n = 45) revealed that this topic had nearly equal percentages of students agreeing or disagreeing with it. Thus it was possible for average group opinion to shift up or down. In addition, marijuana use is illegal in California, carrying potentially stiff penalties. Finally, these initial questionnaires revealed that students are loathe to tell police their personal opinion about marijuana.

After Ss spent a few minutes organizing their statements, E handed out an essay, "Education for the Future" (Muller, 1972), to serve as a filler task for Ss before they were recorded. E then randomly took Ss, one by one, to the video room, reminded him or her of the two-minute time limit and, if S was in a Surveillance condition, repeated the earlier statement that this tape would be sent to several government agencies. E then recorded the statement on audiotape for all Ss and also on videotape if the S was in a Surveillance condition. After S completed the statement, he or she was given a questionnaire with: a mood checklist in semantic-differential form, questions about personal attitudes toward marijuana and government surveillance, and a section on reactions to being in the experiment. S was led back to the waiting room, admonished to keep silent, and another S from the group was selected. E and S continued in this manner until all Ss made their recorded statements.

Finally, E debriefed the group, carefully probing first for suspicion and later fully and thoroughly explaining the practical and theoretical rationales for the experiment. No S expressed suspicion either during the course of the study or during debriefing. Many Ss expressed interest that such an important social issue was being studied experimentally. None were distressed to realize that deception had been employed by psychologists in order to study the effects of another form of deception. All Ss were sworn to secrecy, thanked for their cooperation, and excused

Video Controls. It is possible that the presence of the videocamera itself may have inhibited Ss' verbal expression (cf. Duval and Wicklund, 1972). To assess such an effect, a fifth video control (C) condition was concurrently run. Ss were treated identically to Ss in the NT-NSU condition, except that the videocamera as well as the tape recorder were used to record the marijuana statement. If there were no effect of the videocamera per se, then Ss in C should behave similarly to Ss in NT-NSU. If there were no effect of the Surveillance manipulation but a true effect of the camera, then Ss in C should be like Ss in NT-SU. If there were true effects of both videocamera and Surveillance manipulations, control Ss should show intermediate effects.

Results

The major dependent measures are derived from: (1) the "Bradley Foundation" disguised attitude questionnaire, (2) semantic differential mood ratings, (3) content analyses of the audiotapes, and (4) the post-video attitude questionnaire. The effects of the Threat and Surveillance manipulations upon each class of measures will be presented in the context of a comparison of the individuation and reactance hypotheses. Separate analyses showed there was no significant effect on any of the dependent measures of sex of subjects, order in which the subject was videotaped, or specific group within which the subject was run.

Desire to participate in the experiment. The Bradley questionnaire attempted to assess desire to participate in the experiment after the Threat or No Threat manipulations had been delivered. The three Likert-type items were: "How do you feel about participating in this project?", "Has any pressure been applied to you to participate?", and "Do you feel that your participation in this study has any degree of reservations?".

For each item the S checked off one of five labeled positions. The Threat manipulation had no effect on any of these items (which themselves showed low intercorrelations). This was surprising since E's notes revealed a great deal of tension developed in threatened groups. However, responses to the open-ended question, "Are there any comments you'd like to make about how you feel towards the project you are in?" did show a Threat effect. Responses were coded as positive, negative, or none. Independent scorers reached 100% agreement in coding responses, and only one S (in NT) gave mixed positive and negative comments. There was no difference between T and NT conditions in the number of Ss who did not comment (20 vrs. 23). Disregarding the one mixed case, of the 10 threatened Ss who commented, 9 gave clearly negative comments and only one gave a positive remark. In contrast, 6 of 8 commenting NT Ss gave positive remarks and only two of them gave negative comments. This distribution is highly significant ($p < .01$ by the Fisher exact test). We may conclude from this manipulation check that more Ss in Threat were unhappy about their upcoming surveillance than in No Threat.

Self-rating of mood. We had predicted than the Threat manipulation would arouse reactance which would be accompanied by feelings of anger and annoyance and that the Surveillance manipulation should make subjects feel intimidated. To assess this effect, eleven bi-polar adjective pairs, selected for face validity, were presented in a seven-point semantic differential format. S was asked to describe "How did you feel while participating in the experiment?" by using these scales. The positive pole of every other adjective pair was reversed.

These eleven items were subjected to a principal axis factor analysis with several iterations. Multiple R^2 were used as estimates of communalities. Four factors, accounting for 84% of common variance, were extracted and hand rotated to an orthogonal solution using simple structure and positive manifold as criteria to help positioning the hyperplanes of each factor. This hand rotation was accomplished using a program developed by Comrey (1973). The same four factors were also subjected to orthogonal rotation by the Varimax method (Kaiser, 1958). The two solutions were in substantial agreement. The hand rotated solution is reported here.

Only items loading $>$ .45 were kept in the definition of the factor structure (there were only 4 items loading in the range .30 to .45 on any of the factors). These four factors, the adjective pairs that define them, and their loadings are reported in table 1. The loadings are all positive as the direction of the adjective pairs was corrected for negative loadings. Unweighted factor scores were obtained by adding

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Insert table 1 about here

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up the scores for items defining each factor (Comrey, 1973). These scores were then subjected to analysis of variance.

Under Surveillance, Ss scored higher on the "Anxiety" and "Inhibition" factors (F (1, 51) = 6.09, $p < .025$; F (1, 51) = 5.40, $p < .025$, respectively). Ss in the NT-NSU and C conditions scored significantly lower on these factors compared to the other three conditions (contrast

F (1, 64) = 9.38, $p < .005$; contrast F (1, 64) = 8.10, $p < .01$). This is strong evidence that the mere act of videotaping cannot account for the surveillance effect, but surveillance engenders both anxiety and inhibition.[3]

Subjects who received the Threat manipulation scored higher on the "Anger" and "Honesty" factors (F (1, 50) = 9.12, $p < .005$, and F (1, 52) = 9.32, $p < .005$, respectively). Our inference is that the aroused reactance was accompanied by both feelings of anger and by a feeling that the threat had been overcome by being more honest and assertive of personal opinion.

There were no significant interactions of Surveillance and Threat on any of the factor scores. An eleventh adjective pair, "trusting-suspicious," did not load high on any factor and was not affected by the experimental manipulations. Overall, Ss rated themselves at the neutral point on this item. This validates the earlier report that no S expressed any suspicion of the experimenter's intent.

The validity of these factors was tested by comparing factor scores of Ss who had reported past participation in "any group that advocated the legalization of marijuana." These 24 advocates were less "anxious" (F (1, 67) = 4.00, $p < .05$), less "inhibited" (F (1, 67) = 5.84, $p < .025$), and more "honest" (F (1, 68) = 7.75, $p < .01$), compared to Ss who did not report such participation. People who had previously advocated legalization of marijuana were less worried about doing so again.

Marijuana statements. Two complementary analyses were performed on the tape recorded statements made by Ss. One was a count of the frequency of certain key words, the other involved scoring evaluative

orientations toward selected concepts or objects. The first analysis attempted to assess the effects of the manipulations on the overt content of the statements while the second attempted to gauge the effect of the manipulations on the values the Ss were expressing through the content they employed.

A list of 28 key words was prepared after a preliminary hearing of the tapes, words like felony, alcohol, marijuana, punish, dangerous, and so on. Two other scorers then independently listened to the tapes, blind to S's condition, scoring the frequency of use of these words or their proper synonyms (as determined with a thesarus).

Threatened Ss were significantly more likely than nonthreatened Ss to use the words "illegal" ($F = 11.54$, $p < .005$)[4], "marijuana"($F = 8.74$, $p < .005$), "misdemeanor" ($F = 7.08$, $p < .01$), "crime" ($F = 5.01$, $p < .05$), "dangerous" ($F = 4.83$, $p < .05$) and "wrong" ($F = 2.29$, $p < .15$). In accordance with the individuation-deindividuation hypothesis, Threat Ss were much more likely than Ss in No Threat to use second and third person pronouns--words like "you," "they," "people," "them," etc. ($F = 6.22$, $p < .025$).

There was no effect of actual surveillance on frequency of word usage. A defensive posture may have been evoked in threatened Ss whether or not that threat was actually carried out. Perhaps the effect of threat can be located during the time Ss were given to organize their thoughts, to select the wording of their statements, before they were actually recorded.

For the second analysis, comments about selected concepts or objects were rated as positive, negative, or neutral. The concepts were: police, legal system (excluding police), other social institutions, users of marijuana, sellers of marijuana, marijuana itself, alcohol, felony conviction for marijuana possession, and misdemeanor conviction for marijuana possession. Two independent scorers reached a satisfactory level of agreement in scoring the number of evaluative responses toward each concept (r = .83, $p < .001$, for a randomly selected subsample of 20 Ss).

Again, the Threat manipulation had a large effect. Threatenened Ss made more negative comments about nonmedical aspects of marijuana use (F = 4.96, $p < .05$) and about legalizing marijuana (F = 6.66, $p < .02$). This is in line with the individuation-deindividuation hypothesis that threat should keep Ss "in line" with the authorities. In addition, Surveillance also had an effect. Only 44 percent (14 of 32) of the Ss under Surveillance directly advocated legalization of marijuana, while 73 percent (22 of 30) nonsurveyed Ss recommended its legalization. (χ^2_c (1) = 6.42, $p < .02$). So far, the individuation-deindividuation hypothesis seems to apply--Ss who have reason to worry about the public nature of their private responses seem to take a more "pro-establishment" line.

However, there are some indications of reactance at work, as well. Not only did threatened Ss make more negative comments about legalizing marijuana, they also made more positive comments (M = 2.46 positive remarks for Ss under Threat, M = 1.12 under No Threat, F = 4.41, $p < .05$). In addition, there are several interactions in which Ss in NT-NSU and T-SU conditions behaved differently from Ss in NT-SU and T-NSU. The former made more negative comments about the legal system (F = 5.16 for the interaction, $p < .03$) and more negative comments about the police

and other social institutions combined ($F = 7.23$, $p < .01$). Those Ss who were both threatened and actually surveyed are as openly critical of society as those neither threatened nor videotaped! The Ss in T-SU may have been experiencing reactance which was reduced by attacking the source of the threat: police, legal system, and society.

Another piece of evidence runs contrary to the individuation-deindividuation hypothesis. Ss had been instructed to merely give their name at the beginning of their statement. Several Ss, however, also gave other identification such as their dorm, school, class, etc. There is a strong tendency for Ss under surveillance, especially those in T-SU, to make themselves more individuated instead of less. Half the Ss in T-SU did so, 33% in NT-SU, while only two subjects in the remaining three cells (T-NSU, NT-NSU, C) individuated themselves (χ^2 (4) = 17.04, $p < .005$). When these 14 self-individuated Ss (12 of them in surveillance conditions) are compared to the remaining Ss in the four experimental conditions, they made more negative remarks about the police (F (1, 60) = 6.90, $p < .01$), other social institutions (F (1, 60) = 7.45, $p < .01$), marijuana (F (1, 60) = 6.61, $p < .025$), alcohol (F (1, 60) = 4.96, $p < .05$), and about marijuana users (F (1, 60) = 2.67, $p < .12$).

It is not clear why Ss under surveillance spontaneously individuated themselves more often. Since no Ss in the video-control condition did this, it is unlikely that the effect is merely due to the act of videotaping. It is apparent, however, that this subset of subjects were vacillating between supporting the government's position on marijuana and attacking agencies of the government and society. These Ss, especially those under T-SU, seem both inhibited and aggressive.

anxious about expressing a view with potentially aversive consequences but also willing to attack the punishing agent on safer grounds. Finally, the tapes show that 31% (10 of 32) of surveyed Ss spontaneously sought approval from the E after their statements were completed (such as saying "OK?" or "Is that all right," etc.). Only 7% (2 of 30) nonsurveyed Ss did so (χ^2_c (1) = 4.62, $p < .05$).

Post-video questionnaire. This questionnaire was administered to define characteristics of the subject population as well as to further test the effect of the experimental manipulations.

Threatened Ss felt that marijuana was more likely to be legalized in California that did non-threated Ss (Ms = 5.5 and 7.8 respectively, on a 14-point scale, F (1, 56) = 4.17, $p < .05$). Ss across all conditions were equally willing to participate in a replication of the study. However, in response to an open-ended question "Would you explain your reactions to the experiment," surveyed Ss listed more negative reactions than did others (F (1, 56) = 5.03, $p < .05$).

The majority of Ss, 67%, reported previous use of marijuana (51 of 76). Users were evenly distributed across conditions. Forty-seven percent reported that a friend had been arrested for marijuana use. Ninety-five percent of the Ss said they would feel bad if government agents surveyed them at political rallies. Of these, 81% said that their behavior at such rallies would probably also be affected. Nine Ss reported that they personally knew people who had suffered because of government surveillance of their private or public behavior. Finally, in response to an open-ended question, no S openly expressed hostility toward the E.

Discussion

The behavior of subjects in this experiment generally validates the individuation-deindividuation hypothesis--but there are some interesting complications. All Ss were put in individuating environments. They were often called by name, wore name tags, received a great deal of eye contact from E, and had their personal opinion recorded in private session. They were asked to give their views about a highly controversial subject, criminal penalties for marijuana possession, when in fact a substantial majority of them reported past use of the drug!

Two groups of Ss, those in NT-NSU and C conditions, believed they were giving their opinions just for science, at worst a neutral institution which would not punish them for their views. The three other groups of Ss were led to believe, at one time or another, that their opinion would be made available to potentially powerful punishing agents, the police and FBI. Many of these Ss were caught in a dilemma. They could either support marijuana and face unknown recrimination, or they could inhibit their speech and avoid giving an impression that favored use of an illegal drug.

The evidence from this controlled experiment demonstrates that the threat of surveillance exerts a powerful influence over behavior, beliefs, and feelings, whether or not that threat is realized. Threatened Ss were uneasy and angry about the upcoming surveillance. Their self-reports indicate they felt they had performed honestly, rejecting the implied threat of the surveillance. But, even if not put before a videocamera, their language and arguments clearly show that they

were trying hard not to appear to be advocates of marijuana. The frequent use of the second and third person, rather than first person references, can be seen as an attempt to avoid personal responsibility for their statements, as disclaimers which help to deindividuate self.

Yet, their feelings of anger and honest performance, perhaps overt signs of reactance, do surface. Threatened Ss were critical of the government, especially so if the threat of surveillance was realized. Because of the possible aversive consequences of defending marijuana, reactance was reduced by attacking the "oppressing" agent rather than exercising the threatened freedom of advocacy. The high level of anti-government criticism by Ss in T-SU may in part be due to "blocking" one channel of reducing reactance, as actual surveillance inhibited advocacy.

Though surveyed Ss were less likely to take a pro-marijuana stand, surveillance itself had little effect on the style of expression during surveillance. But completely at odds with the individuation-deindividuation hypothesis is the finding that surveyed Ss, especially those in T-SU, were much more likely to spontaneously individuate themselves at the beginning of their statements. This is particularly curious since surveyed Ss also reported themselves as "anxious" and "inhibited."

Whatever its cause, an interesting aspect of this self-individuation (intended or not) was a strong tendency to criticize both marijuana and agents of the police or society. Such individuation may serve as a "self-imposed" source of reactance arousal (Brehm, 1972).

By individuating oneself the liklihood of recognition (Ziller, 1964) and possible punishment increases. This increased threat to freedom of expression should theoretically increase the level of reactance all the more. As mentioned above, this higher level of reactance can be reduced by increased attack on the threatening agent.

This hypothesis finds common ground between these two theses. Deindividuation is desired in potentially harmful environments (Maslach, 1974); However, if this deindividuation means that one gives up valued behaviors (freedoms), reactance may be aroused. Reactance is probably more acute when the person experiences some sense of volition in the decision to deindividuate himself (cf. Zimbardo, 1969). The person is motivated to both maintain the deindividuation and to exercise the valued behaviors. Of course, deindividuation does not always imply reactance. Many times the submergence of ego indentity can lead to enjoyment of behaviors that are usually inhibited (Festinger, Pepitone, and Newcomb, 1952; Zimbardo, 1969). But there are many instances when we seek deindividuation that is also inhibiting. The desire to deindividuate (perhaps induced by an accompanied by anxiety) and the need to reduce the reactance imposed by this act of deindividuation may result in a powerful clash of motivations.

Another way of looking at this hypothesis and another way to view this entire experiment is from the problem of the moral dilemma. The S was faced with such a dilemma. He could speak his true opinion, which is the <u>right</u> thing to do in American society, as well as in an experiment. However, in this case honesty could be punished. If one chooses to be dishonest, to not stand out from the crowd, the person

is in moral conflict. The reactance aroused by self-inhibition may be reduced by attacking the source of the imposition--the outside punishing agent or the self. The loss of self-esteem is theoretically a means for reducing self-imposed reactance generated by a need for de-individuation.

These examples demonstrate that much more needs to be learned about the interplay of individuation, environmental pressures, perceived loss of freedom, and sense of volitional control.

The present experiment demonstrates, however, that the threat or actuality of government surveillance may psychologically inhibit freedom of speech at the price of increased disrespect for the government and society itself. Our research design did not allow for the easy possibility of avoiding "assembly," but we would expect that the anxiety generated by threat of surveillance would cause many people to totally avoid situations that are assumed to be under surveillance. Since such assumptions are limited only by one's imagination and are encouraged daily by revelations of government and institutional invasion of privacy, the boundaries between paranoid delusions and justified caution indeed become tenuous. The "chilling effect" of surveillance on the exercise of our first amendment freedoms, as revealed in this study, deserves further investigation.

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Footnotes

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[2](on coversheet)

[3]There were no significant differences between video-control (C) and NT-NSU conditions on any of the measures reported in this paper. In many cases, the contrast of these two groups with the three other conditions reached statistical significance. Thus, it seems unlikely that any effect of surveillance can be attributed to apprehension elicited by the videocamera.

[4]Unless otherwise noted, there are 1 and 58 degrees of freedom for all reported F values.

Table 1

Mood Factors, Items, and Loadings[a]

Factor I "Anxiety"		Factor II "Inhibition"	
Unafraid-Afraid	.46	Confortable-Uncomfortable	.79
Sure-Unsure	.71	Free-Restricted	.61
Confident-Worried	.76	Good-Bad	.69
		Confident-Worried	.47
Factor III "Anger"		**Factor IV "Honesty"**	
Content-Angry	.74	Honest-Dishonest	.70
Happy-Sad	.48	Innocent-Guilty	.61

[a]Items were scored in the direction indicated by the factor label. Thus, a high score on a factor indicates a response close to the anchor point indicated by the factor label.